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ABSTRACT

Two studies were conducted to examine teachers' and young children's perceptions of persistence in classroom settings. In the first, 35 elementary school teachers responded to interview questions about (1) the appropriateness of persistence in relation to other strategies children could use to accomplish difficult tasks, (2) children's characteristics (i.e., age, skill level, and emotional state), and (3) tasks that influence expectations for task persistence. In the second study, the question format was altered to be more suitable for young children and the same issues were examined with 52 black preschool, kindergarten, and first-grade children. Both teachers and children generally believed that age, skill level, and emotional state are important considerations for the encouragement of task persistence. In addition, both teachers and children believed that requests for help were appropriate responses to difficult tasks. There was, however, some disagreement about the relative appropriateness of seeking help from others versus persisting without help as a response to task difficulty. (Implications of these findings for achievement motivation research and classroom practices are discussed.) (MP)

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Teachers' and Young Children's perceptions of Task Persistence

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Running Head: Perceptions of Task Persistence

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Abstract

Two studies were conducted to examine perceptions of task persistence. In Study 1, teachers responded to interview questions about the appropriateness of persistence in relation to other strategies children could use to accomplish difficult tasks, and the characteristics of children and of tasks that influence expectations for task persistence. Study 2 examined preschool, kindergarten, and first-grade children's beliefs about these issues. Both teachers and children generally believed that age, skill level, and emotional state are important considerations for the encouragement of task persistence. There was, however, some disagreement about the relative appropriateness of seeking help from others versus persisting without help as a response to task difficulty. The implications of the findings for achievement motivation research and classroom practices are discussed.

Teachers' and Young Children's Perceptions of Task Persistence

In research on academic achievement motivation (e.g., Andrews & Debus, 1978; Crandall, Katkovsky & Crandall, 1965; Feather, 1963), persistence at tasks has generally been regarded as an index of achievement motivation. Persistence has been defined as the length of time a child works without help on a given task (Feather, 1962; Ryans, 1939). The task is often difficult or insoluble, or has involved the experience of failure or removal of rewards for performance. Studies have typically focused on task behavior in laboratory settings where the child works alone. The usual classroom, however, is quite different from the laboratory; persistence may not be the only or the best strategy available to the child who is mastering skills in a classroom setting. An important question is whether persistence as defined and assessed in laboratory studies is related to teachers' and children's perceptions of persistence in the classroom.

In spite of the emphasis placed on task persistence by those concerned with enhancing children's motivation to learn (e.g., Anderson & Messick, 1974), little attention has been given to teachers' and students' views of the role of persistence in the acquisition of skills in classroom settings. Teachers' and students' conceptions of effort have been studied (Nicholls, 1978; Kun, 1977; Harari & Covington, 1981) but it is not always clear whether effort as used in these studies means the active exertion of energy, amount of time on task, or both. Educational practitioners acknowledge the difference between the concepts persistence and effort. Ball (1977, p. 1) quotes a teacher's response to a child who works steadily for long periods of time on a

task: "It is good that she is persistent; but she asks no questions, and she seems to be working only because a teacher has set her a task to do. This child is not well-motivated in my view. I think a well-motivated student is less passive than this one." Teachers' and children's views of persistence are especially worthy of attention, given that studies of students' behavior actually assess persistence, rather than effort. The purpose of the present research was to examine teachers' and young children's perceptions of academic task persistence. Information gained from such an examination will enhance the understanding of what teachers encourage and expect children to learn, and what young children actually learn, in regard to this important behavior.

The significance of persistence as an achievement behavior is not as a goal in itself, but as a means to a goal. Dweck (1983) has identified three types of goals that can and do co-exist in achievement situations. Two of these goals Dweck refers to as "performance" goals: obtaining favorable and avoiding unfavorable judgments of one's competence. The third goal, the "learning" goal, involves seeking to increase competence by acquiring knowledge or mastering skills. The role of persistence in the attainment of this third goal is the focus of this paper.

Persistence, however, may not always lead to task mastery and may, as some researchers (e.g., Diener & Dweck, 1978) have suggested, sometimes be maladaptive. Children may continue to use a given task strategy in order to forestall judgments of failure, despite prolonged lack of success and the availability of more productive alternative strategies. In achievement settings where learning goals are salient,

persistence that does not lead to task mastery is not sufficient. Strategies that maintain the individual's active task involvement and also lead to the acquisition and mastery of skills are needed.

Although the child is isolated from others in the typical laboratory setting and usually performs tasks without intervention or assistance from the experimenter, in the actual classroom children are afforded opportunities to call upon problem-solving resources external to themselves. Children are often free to, and even expected to, attempt tasks under the close supervision of the teacher. Teachers may monitor children's task performance and intervene; teachers may respond to children's requests for assistance. Other children in the classroom also may be used as resources. Nelson-Le Gall (1981) has hypothesized a relationship between task persistence and forms of help-seeking directed toward competence and mastery in the processes of problem solution. Help-seeking of this sort is derived from an orientation of task involvement and, like persistence without help, may enhance achievement. This point of view is in contrast to that underlying experimental studies of achievement motivation in which help-seeking is considered to be the antithesis of persistence (e.g., Winterbottom, 1958).

In investigating the role of persistence as a strategy leading to task mastery in classroom settings, it seems useful to know the beliefs held by teachers and students regarding persistence. Students' and teachers' perceptions are important because they define the subjective reality of the classroom (Lancy, 1978). Teachers' beliefs about persistence may influence their behavior (e.g., Brophy & Good, 1974; Cooper, 1979 ; Covington & Omelich, 1979). Educators generally believe that to achieve academically, students must attend to tasks, persevere

when task requirements seem difficult, and complete assignments (Blumenfeld, Hamilton, Bossert, Wessels, & Meece, 1983); these beliefs are communicated to children and are likely to influence teachers' interactions with their students. Pullis and Cadwell (1982) have documented the influence of teacher perceptions of student behaviors, such as persistence and distractability, on classroom management decisions; for example, students characterized as persistent and not easily distracted were perceived to need less supervision in all classroom settings.

Young children's beliefs about persistence are also important. Children are not simply socialized into school in a passive way but are active in defining the classroom (Lancy, 1978). Although young children's conceptions of persistence (e.g., how, when, why, and by whom it should be displayed in a learning setting) have been neglected by researchers, their conceptions of other general academic and cognitive skills, such as the ability to focus one's attention, the ability to assess the difficulty of a task, and the ability to recognize relationships between effort and ability, have been studied (Harari & Covington, 1981; Kun, 1977; Miller & Bigi, 1977; 1979; Nicholls, 1978; Futterman & Karabenick, Note 1). Miller and Bigi point out that children's understanding of attention may be closely related to their development and use of attentional skills; similarly, children's conceptions of persistence may be related to their capacity to engage in persistent behavior.

Children's conceptions of the meaning and functions of task persistence derive not only from their direct experiences with difficult tasks, but also from exposure to the attitudes and behavior of their teachers, classmates, and parents. For example, teachers' statements about their expectations that students not give up readily on a difficult task, or about the relationship between students' task persistence and their academic outcomes, may influence a student's achievement attitudes and academic performance (e.g., Dweck, Davidson, Nelson, & Enna, 1978). Similar statements from classmates may also influence achievement attitudes and behavior (Dweck & Bush, 1976). In addition, some of the socialization of achievement attitudes and behavior undoubtedly occurs in the home (Scott-Jones, Note 2); thus children may enter school with varying beliefs about persistence that may or may not be consistent with those of teachers.

The present research provides an initial investigation of views of task persistence held by elementary school teachers and young children. The following issues were of particular interest in the present study: the value and expected outcomes of persistence, the generalizability of persistence across task settings, the appropriateness of task persistence compared to other response strategies, and the criteria believed to be important for decisions to encourage task persistence in children. Due to the paucity of empirical research regarding teachers' and children's perceptions of persistence, the selection of these aspects was guided by speculations about task-involvement and achievement by other researchers (e.g., Nicholls, 1979; Note 3) and our own reasoning and intuitions.

Two studies are reported. Study 1 examined teachers' perceptions of task persistence in classroom settings. Study 2 examined perceptions of task persistence held by preschool, kindergarten, and first-grade children. Children at these grade levels were chosen because academic socialization for such fundamental achievement behaviors as persistence is very salient during the early years of transition into the school setting.

In the investigation of teachers' and children's perceptions of persistence, a question that arises is whether highly structured or relatively unstructured interviews will provide the most useful information. An unstructured approach allows respondents to express their own naive beliefs that might not be tapped in a highly structured interview; however, imposing no structure often means that results are too idiosyncratic and variable to allow for group summaries of the data. An intermediate approach was used in the present study. For the children, it was considered especially important to obtain some spontaneously generated responses; therefore, some questions were open-ended but followed by ratings of a series of experimenter-generated responses to the questions.

Study 1: Teachers' Perceptions

Method

Subjects. Thirty-five elementary school teachers enrolled in in-service training courses in early childhood education participated in this study. All but one of the teachers were currently teaching or had recently taught at the elementary level. All teachers except one were females; their average number of years of teaching experience was 10.38, and ranged from 2 to 24 years. Participation was completely

voluntary and was not presented as a part of the course requirements. Teachers received no extra credit for participating, and the class instructor had no knowledge of which teachers participated or of the participants' responses.

Materials and Procedure. Teachers' perceptions of task persistence in young children were assessed by a group-administered questionnaire. The questionnaire consisted of 12 structured items assessing teachers' perceptions of (a) the values and expected outcomes of task persistence; (b) the generalizability of persistence behaviors across task domains (i.e., academic versus nonacademic); (c) the appropriateness of various responses children make to difficult tasks; and (d) variables that influence a teacher's decision to encourage a child to persist at a task without help. Results of the latter two aspects of teachers' perceptions are reported in this paper; results of the entire questionnaire are reported elsewhere (Nelson-Le Gall & Scott-Jones, Note 4). To facilitate presentation of the data, a description of the intended focus of specific questions is presented in the Results section. Responses were made on 5-point Likert rating scales. Because the labels attached to the anchor points of the scales varied by item, the scales used in making ratings are also described in the Results section for each item.

Teachers responded to the questionnaire during the first 20-minutes of one of their regularly scheduled class meetings. They were told that the researchers were interested in teacher beliefs about achievement behaviors in young children, 4- to 6-years of age, specifically, in their beliefs about task persistence in achievement settings. The instructions emphasized to the teachers that the questionnaire was not a

test and that there were no right or wrong answers. The teachers were not required to identify themselves by name or school.

Results and Discussion

Appropriate responses to difficult tasks. A third issue of major interest was teacher perceptions of the appropriateness of various student responses to task difficulty. As previously pointed out, persistence without help is but one of the potential strategies for coping with task difficulty and may not be perceived as the only effective response. Teachers were asked to rate five potential response strategies that children might use to solve difficult tasks on a 5-point scale ranging from 0 (should never be used) to 4 (should always be used). These response strategies, varying in the degree of active pursuit of a solution by the child, were giving up, waiting for an offer of assistance, asking a child for help, asking an adult for help, and persisting without help from others. Each teacher rated these strategies for difficulty encountered in an academic domain (math) and in a nonacademic domain (tying shoes).

Means and standard deviations for teachers' ratings are presented in Table 1. A 2(problem domain) x 5(response strategy) repeated measures analysis of variance performed on these data yielded a highly significant main effect for response strategy, $F(4, 136) = 108.27$, $p < .0001$. This finding is qualified, however, by a significant problem domain x response strategy interaction, $F(4, 136) = 8.87$, $p < .001$ (see Figure 1). The main effect for response strategy accounted for almost two-thirds of the total variance in the data (estimated $\text{omega}^2 = .63$); the interaction of response strategy with problem domain accounted for only a small additional amount (estimated $\text{omega}^2 = .03$). Tests of the

simple main effects for this interaction indicated that teachers' ratings of the appropriateness of giving up on a task and waiting for an offer of help did not differ significantly across domains. Asking an adult for help and persisting at the task without help were rated significantly higher for working math problems than for tying shoes ($p < .001$ and $p < .05$, respectively), whereas asking a child for help was rated higher for tying shoes than for working with math problems ($p < .01$). Pairwise comparisons of the means within each task domain indicated that, in both domains, giving up and waiting for help were rated significantly lower than the other three strategies and giving up was rated significantly lower than waiting for help (p's $< .01$). Persisting without help and asking an adult for help were not significantly different from each other in either of the task domains. Asking a child was not rated significantly different from asking an adult and persisting without help for tying shoes, but was rated significantly lower than these two strategies for working math problems (p's $< .01$).

Insert Table 1 and Figure 1 about here

In addition to the ratings of the five strategies, four questions were asked to assess more directly teachers' perceptions of the relationship between task persistence and help-seeking as indices of goal-orientation. Responses to each of these questions were made on a 5-point scale ranging from never (0) to always (4). When asked whether children should be given assistance whenever they request it, the majority, 63%, thought this was appropriate most or all of the time.

When asked whether parents or siblings, before they give children help with homework, should make sure children have really tried on their own, 80% thought this was appropriate most or all of the time. When asked whether a person who seeks help after trying extensively to complete a task without help is considered to be as persistent as one who continues to try independently, the vast majority (89%) of teachers thought the person would be considered persistent most or all of the time. When asked whether children who persist without help are perceived as smarter than children who more readily ask for help, only 31% of the teachers thought persistent children were smarter most or all of the time. The majority of teachers (69%) believed that only some of the time or only rarely would children who persist without help be smarter than those who ask for help.

In summary, teacher's ratings of alternative strategies appear to reflect a preference for children to engage in active, goal-oriented response strategies that also minimize the risk of acquiring erroneous information about solutions to tasks, especially tasks that are academic in nature. Thus, for academic tasks, teachers viewed asking an adult for help and persisting without help as more appropriate than giving up, waiting for help, or asking a child. Moreover, the findings suggest that the desired pattern of behavior for the child, in the teacher's view, might be persisting without help until all personal resources are exhausted, and then seeking help. Asking for help without giving the task a good try is not desirable but neither is persistent, but unproductive, effort. These findings also support the notion that the range of behaviors teachers perceive to be indicative of a strong achievement orientation includes help-seeking and that help-seeking is

not treated as the antithesis of task persistence in classroom settings.

Influences on the decision to encourage task persistence. A second issue of interest was influences on teachers' decisions to encourage a child to persist without help at difficult tasks. In deciding whether persisting is the most appropriate strategy for completing a task, one might consider various characteristics of the child and/or the task situation. Teachers rated five characteristics on a 5-point scale ranging from 0 (unimportant as a criterion) to 4 (very important as a criterion). The five characteristics were: child's age, child's current skill level, frequency of child's past requests for help, difficulty level of the task, and child's emotional state.

All five characteristics were regarded as important or very important by a majority of teachers. Frequency of the child's past requests for assistance was rated important or very important by 69% of the teachers. In contrast, 95% of the teachers rated the child's present skill level, emotional state, and the difficulty of the task as important or very important in deciding to encourage task persistence. The age of the child was rated as an important or very important consideration by 80% of the sample.

A one-way repeated measures analysis of variance was performed on teachers' mean ratings of these characteristics. Means and standard deviations are presented in Table 2. The analysis indicated that teachers' ratings of the five characteristics differed significantly, $F(4, 136) = 8.49$, $p < .001$. Newman-Keuls post hoc comparisons of the differences between means indicated that the frequency of past requests was rated as less important than all other child or task characteristics, $p < .01$. No other differences between pairs of means

were significant. There may have been less consensus among teachers regarding the importance of the frequency of past requests because, when considered in isolation from the reasons for the request, frequency of past requests may indeed be a less reliable indicator of task orientation. It may be, then, that the reasons for which help was requested in the past, rather than the frequency of requests, is considered to be a more important criterion.

Insert Table 2 about here

Study 2: Children's Perceptions

Study 2 was conducted to examine young children's perceptions of task persistence with respect to the issues examined in the assessment of teacher beliefs reported in Study 1. The two issues were (a) the appropriateness of various responses to task difficulty, and (b) children's perceptions of influences on teachers' decisions to encourage task persistence. The format of the questions was changed to be more suitable for young children. Observations were conducted in the classrooms of the youngest group of participating children in order to devise a questionnaire that would be based on situations similar to those actually experienced by children in the classroom.

Method

Subjects. Participants were 26 first-grade, 13 kindergarten, and 13 preschool children. The mean ages for the groups were 82.6 months, 71.2 months, and 56.9 months, respectively. All participating children were black; 31 were boys and 21 were girls. The first-grade and

kindergarten children attended a parochial school; the preschool children attended a nursery school in the same neighborhood. Written parentalal permission was obtained for each participating child; rate of parental consent was 100%.

Materials and Procedures. The interview schedule consisted of nine brief story vignettes, each followed by a question, based on situations involving task persistence that commonly occur at school for first-grade, kindergarten, and preschool children. To aid children's comprehension, line drawings depicting critical story information accompanied the stories. A set of pictures depicting boys in the situations was used with all the male participants. An identical set of pictures depicting girls was used with female participants.

The first three questions on the interview schedule required children to tell what the story character should do in response to difficulty encountered in various task situations: counting blocks, tying shoe laces, and working a puzzle. Two of these tasks, counting blocks and tying shoe laces were chosen because they correspond to the tasks (i.e., math problems and tying shoes) used in the study of teachers' beliefs to represent academic and non-academic problem domains. The third task, working a puzzle, was selected because it is a non-academic activity that often occurs in young children's classrooms.

Because young children may possess information they do not spontaneously generate in response to open-ended questions, children's ratings of interviewer-generated alternative responses to the first three questions were obtained. After a spontaneous response was obtained, the interviewer asked the children to rate each of five response strategies on a 3-point scale ranging from 1 (would be a bad

thing to do), to 3 (would be a good thing to do), with 2 as a neutral midpoint. Pictures of a smiling face, a neutral face, and a frowning face were used to help the children understand the rating scale. The five strategies to be rated were identical to those rated by teachers: (1) giving up, (2) waiting for an offer of help, (3) asking a child for help. (4) asking an adult for help, and (5) persisting without help.

Five of the remaining six questions were designed to assess children's perceptions of the same five situational and child characteristics that teachers in Study 1 were asked to rate as criteria for encouraging a child to persist at a difficult task. The children were presented five brief story vignettes describing children who encountered difficulty writing their names. For each story, the characters differed on one of the five characteristics, i.e., age (one year older, younger, or same age as subject), skill level (experienced or inexperienced with the task requirements), frequency of past requests for help (infrequent or frequent), task difficulty (easy or difficult), and emotional state (calm or upset). Children were required to choose the story character whom the teacher should encourage to persist at the task. This choice was used as a measure of children's perception of the depicted characteristic as an appropriate influence on teachers' demands for task persistence. A sixth story vignette assessed children's perception of task persistence as an index of ability or "smartness." Children were asked who was smarter, a child who characteristically persists at difficult tasks without help, or a child who characteristically asks the teacher for help without persistent attempts to complete the task.

Children were interviewed individually by a black adult female. The interviewer took each child from the classroom to a quiet room in the school and talked casually with the child for a few minutes, to help the child feel relaxed and at ease. The interviewer told children that she would like to show them some pictures of children and ask them their ideas about the activities of the pictured children. The interviewer emphasized to the children that there were no right or wrong answers to her questions, and that she was only interested in finding out what they thought. The interview with children lasted between 15 and 20 minutes. Children's responses to each interview item were recorded by the interviewer on a standard form and were also tape-recorded. Upon completion of the interview questions, the interviewer told the children that she was pleased with what they had told her, praised the children for their cooperative participation, and escorted them back to their classrooms.

Results and Discussion

Appropriate responses to difficult tasks. The children's spontaneously-offered responses to difficulty in the three tasks (counting blocks, tying shoelaces, working a puzzle) were recorded and classified in one of the five response strategy categories described above. To provide an estimate of intercoder reliability, responses of one-half of the children were coded by a second, independent coder; reliability ranged from 96% to 100% across the five categories and the three questions. All but five of the spontaneous responses fit the categories of asking an adult for help, asking a child for help, or persisting without help. Four of the five remaining responses, generated by two preschool children, fit the category of waiting for an

offer of help. The fifth response, generated by a kindergarten child, fit the category of giving up. Thus, active, goal-oriented response strategies were most common among the strategies children spontaneously generated as those that should be employed to cope with task difficulty.

Children's most prevalent spontaneous responses, persisting without help, asking an adult for help, and asking a child for help, were analyzed by separate 3(grade) X 3(strategy) chi-square tests for each of the three tasks. For two of the tasks, tying shoe laces, and counting, no significant differences were found; for each of these tasks, the three response strategies were mentioned with approximately equal frequency across grade levels. For the puzzle task, however, significant differences were found, $\underline{X}^2(4) = 11.79$, $\underline{p} < .02$. The preschool children reported asking an adult (38%) or child (46%) more frequently than persisting without help (8%); kindergarteners reported asking an adult (54%) and persisting without help (38%) more frequently than asking a child (8%); first-graders reported persisting without help (50%) and asking an adult (38%) more frequently than asking a child (12%). Thus, for the puzzle task, persisting was the least frequently chosen strategy for preschoolers, whereas, asking a child was least frequently chosen for the two older groups.

Children rated on a 3-point scale the five response strategies, give up, wait, ask child, ask adult, and persist, for each of the three questions. An initial analysis of variance indicated that ratings of the response strategies did not vary significantly by task. This finding is in contrast to the significant effect of task (problem domain) found for teachers' ratings in Study 1. Children's ratings were combined across tasks for further analyses. The mean ratings of the

response strategies at each grade level are shown in Table 3. A 3(grade) x 5(strategy) analysis of variance with repeated measures on the latter variable yielded a significant main effect for strategy, $F(4, 196) = 26.20$, $p < .0001$, (estimated omega^2= .27) indicating that giving up was rated significantly lower than the other four strategies. This finding is qualified, however, by a significant grade x strategy interaction, $F(8, 196) = 2.48$, $p < .03$, (estimated omega^2= .05).

Insert Table 3 about here

Tests of the simple main effects for the interaction indicated that, for each strategy, there were no significant differences across grade levels. Ratings of the five strategies were not significantly different for the preschoolers ($p > .10$), but did differ for the other two age groups (p's $< .01$). For the kindergarteners, giving up was rated significantly lower than all other strategies; no other pairwise comparisons were significant. For first-graders, asking a child and asking an adult were not significantly different from each other and were significantly higher than all other strategies. All other pairwise comparisons were significant. After asking a child and asking an adult, the order of ratings of the strategies, in descending order, was persisting without help, waiting for an offer of help, and giving up. Thus, a developmental progression toward increased differentiation among response strategies characterized children's ratings across grade level.

Active, goal-oriented strategies were valued more than passive strategies with advancing grade level. For first-graders and the teachers in Study 1, but not for kindergarteners and preschoolers, the three response strategies, persisting without help, asking a child, and asking an adult were generally rated highest; these three strategies were also generated most frequently in all children's spontaneous responses. First-graders, however, rated asking an adult and asking a child as significantly better than persisting without help. Only two children (preschoolers) thought that simply waiting for an offer of assistance was appropriate and only one child, a preschooler, thought giving up was acceptable.

Children were questioned to determine their beliefs about the association of task persistence with ability. Perceptions of this relationship was of interest given Stipek and Tannatt's (Note 5) examination of young children's criteria for the assessment of academic competence in their classmates. Stipek and Tannatt found that references to work habits, such as persistence, occurred among the criteria used by kindergarteners and first-graders, (although not as frequently as among second- and third-graders). A 2(grade) x 2(yes-no) chi-square test indicated that kindergarteners and first-graders did not differ in the frequency with which persistence was associated with being smart. In contrast to the teachers in Study 1, more than two-thirds of both kindergarteners and first-graders believed that children who persist are smarter than children who frequently ask for help. For kindergarteners and first-graders combined, a chi-square test indicated that these responses were significantly different from a 50-50 split, X^2 (1) = 5.769, $p < .05$. It appears, then, that persisting at difficult

tasks before help is solicited is salient to kindergarten and first-grade children as an index of academic ability. This finding parallels those from studies of children's conceptions of effort (e.g., Harari & Covington, 1981; Nicholls, 1978) that report a tendency for young children to associate high levels of effort with high levels of ability.

Influences on the decision to encourage task persistence. Five questions were used to assess children's perceptions of teachers' criteria for judging when the encouragement of persistence is appropriate. The task described in these questions was writing one's own name. The purpose was to determine children's perceptions of how a child's age, skill level, frequency of past requests for help, task difficulty, or emotional state are used by teachers as criteria for deciding whether persistence would be appropriate task behavior for a child. Children may come to perceive that teachers attend to characteristics of the child and the task when responding to a child's task performance. With increasing age and experience in the classroom setting, children may perceive that teachers are more likely to encourage a child encountering difficulty to persist if the child is older, more skilled, calm, has infrequently asked for help in the past, or has an easy task than if the child is younger, less skilled, emotionally upset, has frequently asked for help in the past, or has a hard task. Such distinctions are important ones for the child to make because they can guide the child in planning strategies for working at the task.

Insert Table 4 about here

Table 4 presents the number of participants of different grade levels responding in various categories to each of the five questions. For each question assessing a child or task attribute, a 3 (grade level) X 2 (chosen-not chosen) chi square test was performed to examine differences among the frequencies of responses. There was an increase with grade in the number of children choosing the older child, $\underline{X}^2(2) = 11.05$, $p < .01$; the calm child, $\underline{X}^2(2) = 8.30$, $p < .02$; and the child who had infrequently asked for help in the past, $\underline{X}^2(2) = 13.55$, $p < .01$, as the children teachers would encourage to persist in the face of difficulty. Although highly skilled students were also more frequently chosen with increasing grade level , this trend was not significant. In addition, no significant differences were found for task difficulty as a criterion for the encouragement of task persistence. The finding of young children's apparent insensitivity to task difficulty as a factor influencing achievement behaviors and achievement outcomes is in line with the findings of other researchers in this area (e.g., Nicholls, 1978).

General Discussion

The purpose of the present research was to examine teachers' and young children's perceptions of persistence in classroom settings. Goals of the research were to describe teachers' and children's perceptions of the appropriateness of persistence in relation to other strategies children could use, and the characteristics of children and of tasks that should be considered in determining whether persistence is an appropriate strategy.

Teachers' and children's perceptions of persistence were found to be similar on several issues. Similarity between children's and teachers' views increased across grade level, suggesting that the acquisition of attitudes toward and perceptions of task persistence is well underway by first grade. Teachers, and with increasing grade level, children, agreed on the importance of a child's age, skill level, and emotional state as criteria for encouraging persistence at difficult tasks. In addition, both teachers and children believed that requests for help were appropriate responses to difficult tasks. Teachers' and children's beliefs regarding the appropriateness of encouraging persistence based upon previous requests for help were also similar. Neither group demonstrated high levels of consensus in their perceptions of the frequency of previous requests for help as a reliable criterion in the decision to encourage task persistence.

Although compatible for the most part, children's and teachers' views lacked correspondence in some areas. One major area of difference was the relative appropriateness of seeking help from others versus persisting without help as a response to task difficulty. Whereas teachers tended to believe requests for assistance should be made only after children have made persistent attempts to complete the task by themselves without help, children viewed requests for assistance as at least as desirable as, and sometimes more desirable than, persistence at a difficult task without help from others. This discrepancy suggests that teachers may not effectively convey, or that children may not adequately learn, that help should be sought only after persistent attempts to perform the task independently. Alternatively, even if this stipulation is made salient by teachers and understood by children, it

may be that young children do not agree that it is a good idea to ask for help only after persistent attempts to solve the task without help. More research conducted in actual classroom settings is needed to elucidate the nature of teacher communication and encouragement of task persistence, and the impact of that communication on student attitudes and behaviors.

The consistency of both teachers' perceptions and students' perceptions in the present study suggests that the present findings have a fair degree of generality. The consistency between students and teachers is more striking when one considers that the teachers were predominantly white and the children were all black. Black children have been said to perform lower than white children on measures of persistence and achievement motivation (Katz cited in Weiner, 1972). The present results suggest that black children entering school have some perceptions of persistence similar to their teachers' perceptions.

Research is needed to examine simultaneously the relationship between these perceptions and students' achievement behaviors. Children who believe that persistence at tasks is important may not always be able to persist at academic tasks. Young children may not monitor the degree of their persistence at a task with sufficient accuracy to be able to judge when they have "tried enough" without help. Other variables, such as the child's interest in the task, encouragement from others, rewards for completing the task, or negative consequences of not completing the task, might also play a major role in the development of task persistence.

The findings of the present study suggest the necessity to move beyond a simple conception of persistence as the amount of time a child spends working on a task without help, if research is to be more successful in explaining the relationship between motivation and achievement in classroom settings. Carroll (1963) argues that persistence should refer only to the amount of time actively engaged in the task. If measured simply as the amount of time spent on a task, persistence may be more akin to patience than to achievement strivings.

In conclusion, the present research took a much needed initial step in investigating the nature of teachers' and students' perceptions of task persistence. If we are to broaden our knowledge of how beliefs about achievement are formed and are consequently translated into achievement motives and behaviors in early childhood and beyond, research must closely examine children's understanding of achievement behaviors as well as the actual behaviors themselves. Future research should focus on persistence, not simply as time on task, but as part of children's overall strategies for solving problems and completing tasks. Attention should be given to children's strategies for assessing their knowledge, monitoring their performance, and completing tasks when difficulty is encountered. Such lines of inquiry should help educational planners and practitioners create learning environments that capitalize on the goal-directedness of all students.

Reference Notes

1. Futterman, R., & Karabenick, J. Knowledge of task difficulty in preschool and kindergarten children. Paper presented at the meeting of the Society for Research in Child Development, San Francisco, March 1979.

2. Scott-Jones, D. Education, Schooling, and Families. Paper presented at the meeting of the American Psychological Association, Montreal, September, 1980.

3. Nicholls, J. G. Motivation for Intellectual Development and Performance: An Integrative Framework. Paper presented at the meeting of the American Educational Research Association, Boston, April 1980.

4. Nelson-Le Gall, S. & Scott-Jones, D. Teachers' and young children's beliefs about the role of task persistence in academic achievement. Paper presented at annual meeting of the American Educational Research Association, Los Angeles, April, 1981.

5. Stipek, D. & Tannatt, L. Children's Judgments of Academic Competence. Unpublished manuscript, University of California, Los Angeles, 1980.

References

Anderson, S., & Messick, S. Social competency in young children. Developmental Psychology, 1974, 10, 282-293.

Andrews, G. R., & Debus, R. L. Persistence and the causal perception of failure: Modifying cognitive attributions. Journal of Educational Psychology, 1978, 70, 154-166.

Blumenfeld, P., Hamilton, V. L., Bossert, S., Wessels, K., and Meece, J. Teacher talk and student thought: Socialization into the student role. In J. Levine & M. Wang (Eds.) Teacher and student perceptions: Implications for learning. Hillsdale, NJ: Erlbaum, 1983.

Brophy, J. & Good, T. Teacher-student relationships: Causes and consequences. New York: Holt, Rinehart, &Winston, 1974.

Carroll, J. B. A model of school learning. Teachers College Record, 1963, 64, 723-733.

Cooper, H. Pygmalion grows up: A model for teacher expectation communication and performance. Review of Educational Research, 1979, 49, 389-410.

Crandall, V. C., Katkovsky, W., & Crandall, V. J. Children's beliefs in their own control of reinforcements in intellectual-academic achievement situations. Child Development, 1965, 36, 91-109.

Diener, C., & Dweck, C. An analysis of learned helplessness: Continuous changes in performance, strategy, and achievement cognitions following failure. Journal of Personality and Social Psychology, 1978, 36, 451-462.

Dweck, C. & Bush, E. Sex differences in learned helplessness: I. Differential debilitation with peer and adult evaluators. Developmental Psychology, 1976, 12, 147-156.

Dweck, C., Davidson, W., Nelson, S. & Enna, B. Sex differences in learned helplessness: II. The contingencies of evaluative feedback in the classroom and III. An experimental analysis. Developmental Psychology, 1978, 14, 268-276.

Dweck, C. & Elliott, E. Achievement Motivation. In P. Mussen (Ed.), Carmichael's Manual of Child Psychology. New York: Wiley, 1983.

Feather, N. T. The study of persistence. Psychological Bulletin, 1962, 59(2), 94-115.

Feather, N. T. Persistence at a difficult task with alternative task of intermediate difficulty. Journal of Abnormal and Social Psychology, 1963, 66, 604-609.

Harari, O. & Covington, M. Reactions to achievement behavior from a teacher and student perspective: A developmental analysis. American Educational Research Journal, 1981, 18, 15-28.

Kun, A. Development of the magnitude-covariation and compensation schemata in ability and effort attributions of performance. Child Development, 1977, 48, 862-873.

Lancy, D. The classroom as phenomenon. In D. Bar-Tal and L. Saxe (Eds.), Social psychology of education. Washington, DC: Hemisphere, 1978.

Miller, P. H. & Bigi, L. Children's understanding of how stimulus dimensions affect performance. Child Development, 1977, 48, 1712-1715.

Miller, P. H. & Bigi, L. The development of children's understanding of attention. Merrill-Palmer Quarterly, 1979, 25(4), 235-250.

Nelson-Le Gall, S. Help-seeking: An understudied problem-solving skill in children. Developmental Review, 1981, 1, 224-246.

Nicholls, J.G. The development of the concepts of effort and ability, perception of academic attainment, and the understanding that difficult tasks require more ability. Child Development, 1978, 49, 800-814.

Nicholls, J.G. Quality and equality in intellectual development: The role of motivation in education. American Psychologist, 1979, 34, 1071-1084b.

Pullis, M. & Cadwell, J. The influence of children's temperament characteristics on teachers' decision strategies. American Educational Research Journal, 1982, 19, 165-181.

Ryans, D.G. The measurement of persistence: An historical review. Psychological Bulletin, 1939, 36, 715-737.

Weiner, B. Attribution theory, achievement motivation, and the educational process. Review of Educational Research, 1972, 42, 203-215.

Weiner, B., Frieze, I., Kukla, A., Reed, L., Rest, S., & Rosenbaum, R. Perceiving the causes of success and failure. New York: General Lerning Press, 1971.

Winterbottom, M. The relation of need for achievement to learning experiences in independence and mastery. In J. Atkinson (Ed.), Motives in fantasy, action, and society. Princeton, NJ: Van Nostrand, 1958.

Footnotes

The term "effort" has been used frequently in achievement motivation research (e.g., Weiner, Frieze, Kukla, Reed, Rest, & Rosenbaum, 1971). Researchers sometimes appear to use effort and persistence interchangeably; the two terms, however, have distinct meanings in common usage and should also be clearly distinguished for research purposes. Persistence refers to sustained work on a given task over a period of time; it means remaining unchanged or fixed in a certain behavior. In contrast, effort means the active use of energy in producing a result. The notion of energetic activity that typifies effort is not necessarily part of persistence, which connotes sustained time spent on a task. Because effort is difficult to assess in an objective manner, researchers rely on persistence, that is, the amount of time spent on a task, as a measure of achievement motivation.

The teachers at the participating nursery school deemed items about the relative abilities of children to be inappropriate for children at the school. Therefore, this item was administered to kindergarten and first-grade subjects only.

Table 1

Means and Standard Deviations for Teachers' Ratings of the Appropriateness of Children's Responses to Difficult Tasks by Problem Domain

	Problem Domain			
	Nonacademic		Academic	
Response Strategy	M	SD	M	SD
Give Up	.77	.65	.60	.55
Wait	1,23	,55	1.11	.72
Ask Child	2,20	,41	1.83	.51
Ask Adult	2.43	.61	2.97	.75
Persist	2.40	.55	2.69	.87

Table 2

Means and Standard Deviations for Teachers' Ratings of the Importance of Child and Task Characteristics Influencing Their Demand for Persistence of Difficult Tasks

Characteristic	M	SD
Child's Age	3.29	.788
Child's Skill Level	3.60	.604
Frequency of Past Requests for Help	2.89	.796
Child's Emotional State	3.60	.604
Task Difficulty	3.40	.604

Table 3

Means and Standard Deviations for Children's Ratings of the Appropriateness of Response Strategies

	Grade					
	Nursery		Kindergarten		First	
Response Strategy	M	SD	M	SD	M	SD
Give Up	1.67	.56	1.41	.56	1.37	.48
Wait	2.13	.52	2.18	.62	2.02	.66
Ask Child	2.39	.52	2.31	.48	2.58	.41
Ask Adult	2.26	.45	2.51	.59	2.58	.47
Persist	1.85	.70	2.56	.42	2.15	.60

Table 4

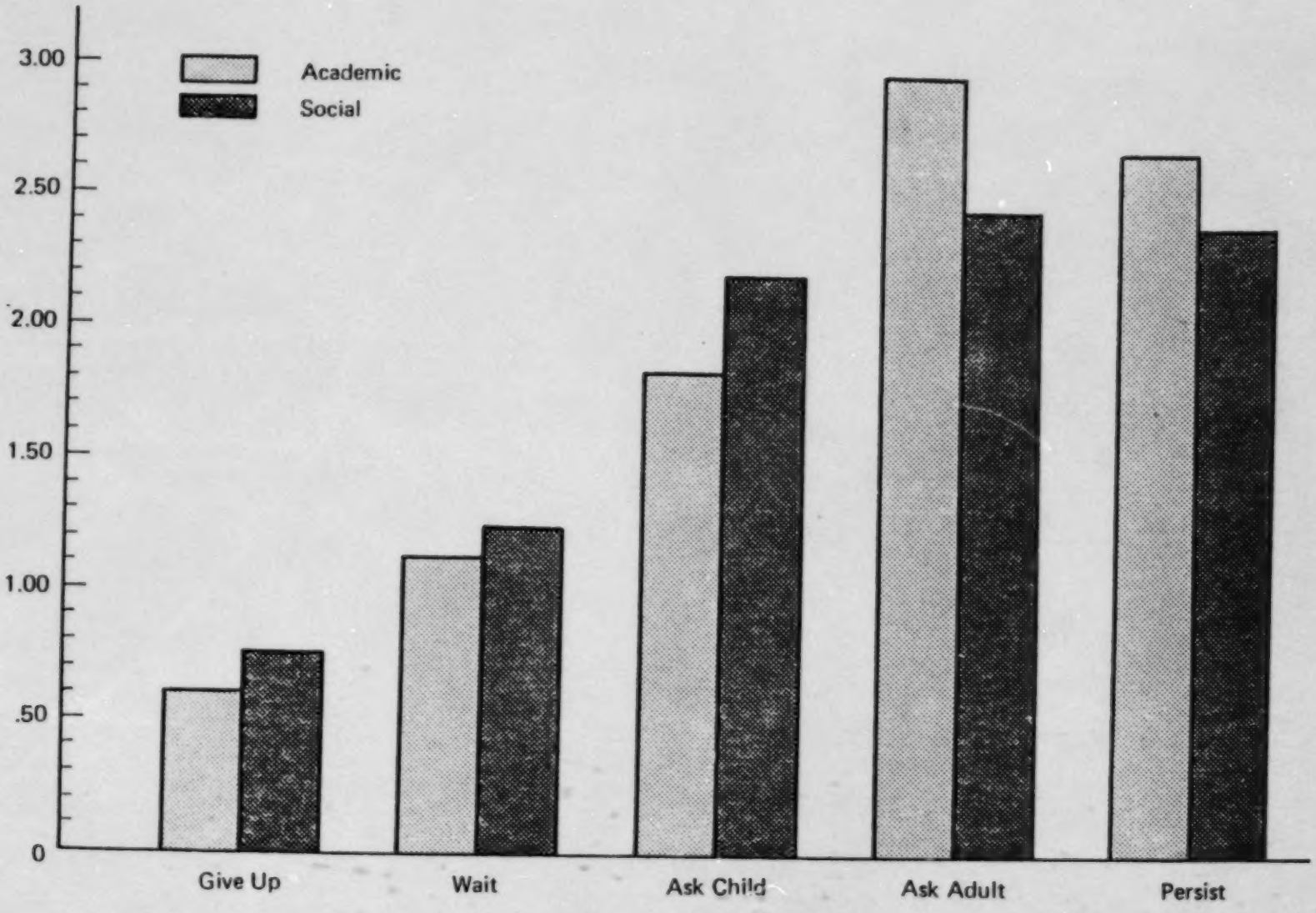
Children's Criteria for Deciding When Persistence Should be Encouraged

		n=13 Nursery	n=13 Kindergarten	n=26 First
Age	Younger	5(39)	0(0)	2(08)
	Peer	2(15)	0(0)	3(11)
	Older	6(46)	13(100)	21(81)
Skill Level	High	7(54)	11(85)	19(73)
	Low	6(46)	2(15)	7(27)
Frequency of Past Requests	High	11(85)	5(39)	6(23)
	Low	2(15)	8(62)	20(77)
Task Difficulty	Hard	3(23)	5(39)	11(42)
	Easy	10(77)	8(62)	15(58)
Emotional State	Upset	5(39)	3(23)	8(31)
	Calm	8(62)	10(77)	18(69)

Note. Numbers in parentheses represent percentages.

Figure Caption

Figure 1. Teachers' Mean Ratings of the Appropriateness of Response Strategies by Problem Domain.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Academic
Social
Give Up
Wait
Ask Child
Ask Adult
Persist